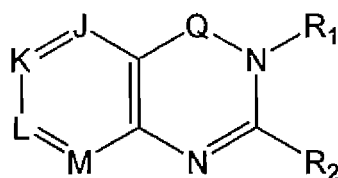


### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

#### Listing Of Claims

1. (currently amended) A compound comprising Formula XXXVII:



XXXVII

wherein

Q is selected from the group consisting of CO, CS, SO, SO<sub>2</sub>, or C=NR<sub>9</sub>;

J, K, L, and M are each independently selected from the group of CR<sub>12</sub> and N, provided that at least one of K and L is CR<sub>12</sub> where R<sub>12</sub> is not hydrogen;

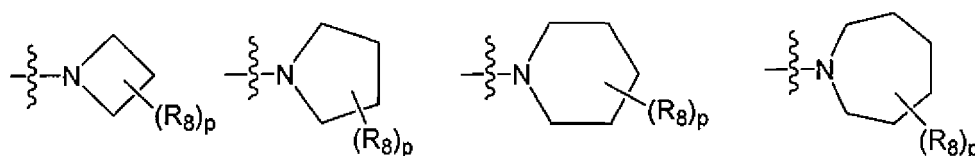
R<sub>1</sub> is -ZR<sub>m</sub>, where Z is a moiety providing 1-6 atom separation between R<sub>m</sub> and the ring to which R<sub>1</sub> is attached, and R<sub>m</sub> is selected from the group consisting of a substituted or unsubstituted (C<sub>3-7</sub>)cycloalkyl and aryl;

R<sub>2</sub> is -UV, where U is a moiety providing 1-6 atom separation between V and the ring to which R<sub>2</sub> is attached and V comprises a basic nitrogen atom that is capable of interacting with a carboxylic acid side chain of an active site residue of a protein;

R<sub>9</sub> is hydrogen or is selected from the group consisting of alkyl, cycloalkyl, heterocycloalkyl, arylalkyl, heteroarylalkyl, bicycloaryl, and heterobicycloaryl, each substituted or unsubstituted; and

each R<sub>12</sub> is hydrogen or is independently selected from the group consisting of halo, perhalo(C<sub>1-10</sub>)alkyl, CF<sub>3</sub>, alkyl, aryl, heteroaryl, aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, amino, thio, cyano, nitro, alkoxy, a carbonyl group, imine group, sulfonyl group and sulfinyl group, each substituted or unsubstituted.

2. (original) A compound according to claim 1, wherein V is selected from the group consisting of a primary, secondary or tertiary amine, a heterocycloalkyl comprising a nitrogen ring atom, and a heteroaryl comprising a nitrogen ring atom
3. (original) A compound according to claim 1, wherein V is selected from the group consisting of a substituted or unsubstituted 3, 4, 5, 6 or 7 membered ring wherein at least one substituent is selected from the group consisting of a primary, secondary or tertiary amine, a heterocycloalkyl comprising a nitrogen ring atom, and a heteroaryl comprising a nitrogen ring atom.
4. (original) A compound according to claim 1, wherein the basic nitrogen of V is separated from the ring atom to which  $R_2$  is attached by between 1-5 atoms.
5. (original) A compound according to claim 1, wherein the basic nitrogen of V forms part of a primary, secondary or tertiary amine.
6. (original) A compound according to claim 1, wherein the basic nitrogen of V is a nitrogen ring atom of a heterocycloalkyl comprising a nitrogen ring atom or a heteroaryl comprising a nitrogen ring atom.
7. (original) A compound according to claim 1, wherein  $R_2$  is selected from the group consisting of



wherein p is 0-12 and each  $R_8$  is independently selected from the group consisting of halo, perhalo( $C_{1-10}$ )alkyl,  $CF_3$ , cyano, nitro, hydroxy, alkyl, aryl, heteroaryl,

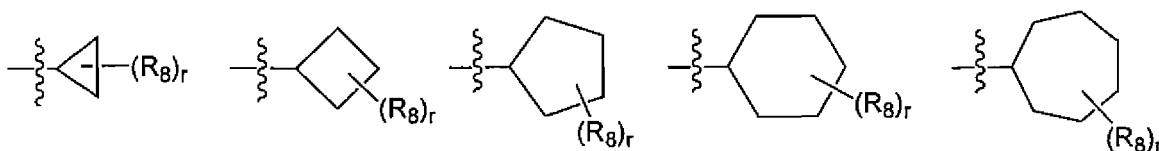
aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, amino, thio, alkoxy, carbonyl group, imino group, sulfonyl group and sulfinyl group, each substituted or unsubstituted, with the proviso that at least one  $R_8$  serves as V.

8. (original) A compound according to claim 7, wherein at least one  $R_8$  is a primary, secondary or tertiary amine.

9. (original) A compound according to claim 7, wherein at least one  $R_8$  is a substituted or unsubstituted heterocycloalkyl comprising a nitrogen ring atom or a substituted or unsubstituted heteroaryl comprising a nitrogen ring atom.

10. (original) A compound according to claim 7, wherein at least one  $R_8$  is selected from the group consisting of  $-NH_2$ ,  $-NH(C_{1-5} \text{ alkyl})$ ,  $-N(C_{1-5} \text{ alkyl})_2$ , piperazine, imidazole, and pyridine.

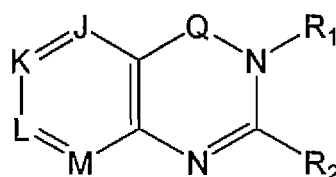
11. (original) A compound according to claim 1, wherein  $R_2$  is selected from the group consisting of



wherein  $r$  is 0-13 and each  $R_8$  is independently selected from the group consisting of halo, perhalo( $C_{1-10}$ )alkyl,  $CF_3$ , cyano, nitro, hydroxy, alkyl, aryl, heteroaryl, aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, amino, thio, alkoxy, carbonyl group, imino group, sulfonyl group and sulfinyl group, each substituted or unsubstituted, with the proviso that at least one  $R_8$  serves as V.

12. (original) A compound according to claim 11, wherein at least one  $R_8$  is a primary, secondary or tertiary amine.
13. (original) A compound according to claim 11, wherein at least one  $R_8$  is a substituted or unsubstituted heterocycloalkyl comprising a nitrogen ring atom or a substituted or unsubstituted heteroaryl comprising a nitrogen ring atom.
14. (original) A compound according to claim 11, wherein at least one  $R_8$  is selected from the group consisting of  $-NH_2$ ,  $-NH(C_{1-5} \text{ alkyl})$ ,  $-N(C_{1-5} \text{ alkyl})_2$ , piperazine, imidazole, and pyridine.
15. (original) A compound according to claim 1, wherein  $R_2$  is selected from the group consisting of 3-amino-piperidin-1-yl, 3-aminomethyl-pyrrolidin-1-yl, azetidin-1-yl, 3-aminoazetidin-1-yl, pyrrolidin-1-yl, 3-aminocyclopent-1-yl, 3-aminomethylcyclopent-1-yl, 3-aminomethylcyclohex-1-yl, hexahydroazepin-1-yl, 3-aminohexahydroazepin-1-yl, 3-aminocyclohex-1-yl, piperazin-1-yl, homopiperazin-1-yl, 3-amino-pyrrolidin-1-yl, and R-3-aminopiperidin-1-yl, each substituted or unsubstituted.
16. (original) A compound according to claim 1, wherein  $R_2$  is selected from the group consisting of a substituted or unsubstituted 3, 4, 5, 6 or 7 membered ring.
17. (original) A compound according to claim 16, wherein  $R_1$  is  $-ZR_m$ , where Z is a moiety providing 1-6 atom separation between  $R_m$  and the ring to which  $R_1$  is attached, and  $R_m$  is selected from the group consisting of a substituted or unsubstituted  $(C_{3-7})$ cycloalkyl and aryl.
18. (original) A compound according to claim 1, wherein  $R_1$  is  $-ZR_m$ , where Z is a moiety providing 1-6 atom separation between  $R_m$  and the ring to which  $R_1$  is attached, and  $R_m$  is selected from the group consisting of a substituted or unsubstituted  $(C_{3-7})$ cycloalkyl and aryl.
19. (original) A compound according to claim 1, wherein at least one  $R_{12}$  is halogen.

20. (original) A compound according to claim 1, wherein at least one R<sub>12</sub> is fluorine.
21. (currently amended) A compound comprising Formula XXXVIII:



XXXVIII

wherein

Q is selected from the group consisting of CO, CS, ~~SO~~, ~~SO<sub>2</sub>~~, or C=NR<sub>9</sub>;

J, K, L, and M are each independently ~~selected from the group of CR<sub>12</sub> and N~~,  
provided that at least one of K and L is CR<sub>12</sub> where R<sub>12</sub> is not hydrogen;

R<sub>1</sub> is -ZR<sub>m</sub>, where Z is a moiety providing 1-6 atom separation between R<sub>m</sub> and the ring to which R<sub>1</sub> is attached, and R<sub>m</sub> is selected from the group consisting of a substituted or unsubstituted (C<sub>3-7</sub>)cycloalkyl and aryl;

R<sub>2</sub> is selected from the group consisting of a substituted or unsubstituted 3, 4, 5, 6 or 7 membered ring;

R<sub>9</sub> is hydrogen or is selected from the group consisting of alkyl, cycloalkyl, heterocycloalkyl, arylalkyl, heteroarylalkyl, bicycloaryl, and heterobicycloaryl, each substituted or unsubstituted; and

each R<sub>12</sub> is hydrogen or is independently selected from the group consisting of halo, perhalo(C<sub>1-10</sub>)alkyl, CF<sub>3</sub>, alkyl, aryl, heteroaryl, aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, amino, thio, cyano, nitro, alkoxy, a carbonyl group, imine group, sulfonyl group and sulfinyl group, each substituted or unsubstituted.

22. (original) A compound according to claim 21, wherein Z provides 1-3 atom separation between R<sub>m</sub> and the ring.

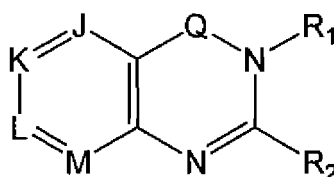
23. (original) A compound according to claim 21, wherein Z provides 1 atom separation between R<sub>m</sub> and the ring.
24. (original) A compound according to claim 23, wherein the 1 atom separation is provided by an atom selected from the group consisting of C, N, O, and S.
25. (original) A compound according to claim 23, wherein the 1 atom separation is provided by a carbon atom.
26. (original) A compound according to claim 23, wherein the 1 atom separation is provided by an oxygen atom.
27. (original) A compound according to claim 23, wherein the 1 atom separation is provided by a nitrogen atom.
28. (original) A compound according to claim 21, wherein Z is selected from the group consisting of -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-, -C(O)-, -CH<sub>2</sub>C(O)-, -C(O)CH<sub>2</sub>-, -CH<sub>2</sub>-C(O)CH<sub>2</sub>-, -C(O)CH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>C(O)-, -O-, -OCH<sub>2</sub>-, -CH<sub>2</sub>O-, -CH<sub>2</sub>OCH<sub>2</sub>-, -OCH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>O-, -N(CH<sub>3</sub>)-, -NHCH<sub>2</sub>-, -CH<sub>2</sub>NH-, -CH<sub>2</sub>NHCH<sub>2</sub>-, -NHCH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>NH-, -NH-C(O)-, -NCH<sub>3</sub>-C(O)-, -C(O)NH-, -C(O)NCH<sub>3</sub>-, -NHC(O)CH<sub>2</sub>-, -C(O)NHCH<sub>2</sub>-, -C(O)CH<sub>2</sub>NH-, -CH<sub>2</sub>NHC(O)-, -CH<sub>2</sub>C(O)NH-, -NHCH<sub>2</sub>C(O)-, -S-, -SCH<sub>2</sub>-, -CH<sub>2</sub>S-, -SCH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>SCH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>S-, -C(O)S-, -C(O)SCH<sub>2</sub>-, -CH<sub>2</sub>C(O)S-, -C(O)CH<sub>2</sub>S-, and -CH<sub>2</sub>SC(O)-, each substituted or unsubstituted.
29. (original) A compound according to claim 21, wherein Z is selected from the group consisting of -CH<sub>2</sub>-, -C(O)-, -C(S)-, -C(NH)-, -C(NR<sub>9</sub>)-, -O-, -N(H)-, -N(R<sub>9</sub>)-, and -S-.
30. (original) A compound according to claim 21, wherein R<sub>m</sub> is a substituted or unsubstituted -(C<sub>3-7</sub>)cycloalkyl.

31. (original) A compound according to claim 21, wherein  $R_m$  is a substituted or unsubstituted aryl.
32. (original) A compound according to claim 21, wherein  $R_m$  is a substituted or unsubstituted phenyl.
33. (original) A compound according to claim 21, wherein  $R_m$  is selected from the group consisting of (2-cyano)phenyl, (3-cyano)phenyl, (2-hydroxy)phenyl, (3-hydroxy)phenyl, (2-alkenyl)phenyl, (3-alkenyl)phenyl, (2-alkynyl)phenyl, (3-alkynyl)phenyl, (2-nitro)phenyl, (3-nitro)phenyl, (2-carboxy)phenyl, (3-carboxy)phenyl, (2-carboxamido)phenyl, (3-carboxamido)phenyl, (2-sulfonamido)phenyl, (3-sulfonamido)phenyl, (2-tetrazolyl)phenyl, (3-tetrazolyl)phenyl, (2-aminomethyl)phenyl, (3-aminomethyl)phenyl, (2-amino)phenyl, (3-amino)phenyl, (2-hydroxymethyl)phenyl, (3-hydroxymethyl)phenyl, (2-phenyl)phenyl, (3-phenyl)phenyl, (2-CONH<sub>2</sub>)phenyl, (3-CONH<sub>2</sub>)phenyl, (2-CONH(C<sub>1-7</sub>)alkyl)phenyl, (3-CONH(C<sub>1-7</sub>)alkyl)phenyl, (2-CO<sub>2</sub>(C<sub>1-7</sub>)alkyl)phenyl, (3-CO<sub>2</sub>(C<sub>1-7</sub>)alkyl)phenyl, -NH<sub>2</sub>, -OH, -(C<sub>3-7</sub>)alkyl, -alkene, -alkyne, -CCH, -(C<sub>3-7</sub>)cycloalkyl, and -aryl, each substituted or unsubstituted.
34. (original) A compound according to claim 21, wherein  $R_1$  is -OR<sub>11</sub>, where  $R_{11}$  is selected from the group consisting of substituted or unsubstituted alkyl, cycloalkyl, aryl, heteroaryl, heterocycloalkyl, arylalkyl, heteroarylalkyl, bicycloaryl, and heterobicycloaryl.
35. (original) A compound according to claim 21, wherein Z is a carbonyl.
36. (original) A compound according to claim 21, wherein  $R_1$  is selected from the group consisting of -(CH<sub>2</sub>)-(2-cyano)phenyl, -(CH<sub>2</sub>)-(3-cyano)phenyl, -(CH<sub>2</sub>)-(2-hydroxy)phenyl, -(CH<sub>2</sub>)-(3-hydroxy)phenyl, -(CH<sub>2</sub>)-(2-alkenyl)phenyl, -(CH<sub>2</sub>)-(3-alkenyl)phenyl, -(CH<sub>2</sub>)-(2-alkynyl)phenyl, -(CH<sub>2</sub>)-(3-alkynyl)phenyl, -(CH<sub>2</sub>)-(2-nitro)phenyl, -(CH<sub>2</sub>)-(3-nitro)phenyl, -(CH<sub>2</sub>)-(2-carboxy)phenyl, -(CH<sub>2</sub>)-(3-carboxy)phenyl, -(CH<sub>2</sub>)-(2-carboxamido)phenyl, -(CH<sub>2</sub>)-(3-carboxamido)phenyl, -(CH<sub>2</sub>)-(2-sulfonamido)phenyl, -(CH<sub>2</sub>)-(3-sulfonamido)phenyl,

-(CH<sub>2</sub>)-(2-tetrazolyl)phenyl, -(CH<sub>2</sub>)-(3-tetrazolyl)phenyl, -(CH<sub>2</sub>)-(2-aminomethyl)phenyl, -(CH<sub>2</sub>)-(3-aminomethyl)phenyl, -(CH<sub>2</sub>)-(2-amino)phenyl, -(CH<sub>2</sub>)-(3-amino)phenyl, -(CH<sub>2</sub>)-(2-hydroxymethyl)phenyl, -(CH<sub>2</sub>)-(3-hydroxymethyl)phenyl, -(CH<sub>2</sub>)-(2-phenyl)phenyl, -(CH<sub>2</sub>)-(3-phenyl)phenyl, -(CH<sub>2</sub>)-(2-CONH<sub>2</sub>)phenyl, -(CH<sub>2</sub>)-(3-CONH<sub>2</sub>)phenyl, -(CH<sub>2</sub>)-(2-CONH(C<sub>1-7</sub>)alkyl)phenyl, -(CH<sub>2</sub>)-(3-CONH(C<sub>1-7</sub>)alkyl)phenyl, -(CH<sub>2</sub>)-(2-CO<sub>2</sub>(C<sub>1-7</sub>)alkyl)phenyl, -(CH<sub>2</sub>)-(3-CO<sub>2</sub>(C<sub>1-7</sub>)alkyl)phenyl, -CH<sub>2</sub>-NH<sub>2</sub>, -CH<sub>2</sub>-OH, -CH<sub>2</sub>-(C<sub>3-7</sub>)alkyl, -CH<sub>2</sub>-alkene, -CH<sub>2</sub>-alkyne, -CH<sub>2</sub>-CCH, -CH<sub>2</sub>-(C<sub>3-7</sub>)cycloalkyl, and -CH<sub>2</sub>-aryl, each substituted or unsubstituted.

37. (original) A compound according to claim 21, wherein R<sub>1</sub> is selected from the group consisting of -(C<sub>1</sub>)alkyl-aryl, -(C<sub>1</sub>)alkyl-bicycloaryl, -aminoaryl, -aminoheteroaryl, -aminobicycloaryl, -aminoheterobicycloaryl, -O-aryl, -O-heteroaryl, -O-bicycloaryl, -O-heterobicycloaryl, -(S)-aryl, -(S)-heteroaryl, -(S)-bicycloaryl, -S-heterobicycloaryl, -C(O)-aryl, -C(O)-heteroaryl, -C(O)-bicycloaryl, -C(O)-heterobicycloaryl, -C(S)-aryl, -C(S)-heteroaryl, -C(S)-bicycloaryl, -C(S)-heterobicycloaryl, -S(O)-aryl, -S(O)-heteroaryl, -S(O)-bicycloaryl, -SO<sub>2</sub>-heterobicycloaryl, -SO<sub>2</sub>-aryl, -SO<sub>2</sub>-heteroaryl, -SO<sub>2</sub>-bicycloaryl, -SO<sub>2</sub>-heterobicycloaryl, -C(NR<sub>9</sub>)-aryl, -C(NR<sub>9</sub>)-heteroaryl, -C(NR<sub>9</sub>)-bicycloaryl, -C(NR<sub>9</sub>)-heterobicycloaryl, each substituted or unsubstituted.

38. (currently amended) A compound comprising Formula XXXIX:



XXXIX

wherein

Q is selected from the group consisting of CO, CS, SO, SO<sub>2</sub>, or C=NR<sub>9</sub>;

J, K, L, and M are each independently selected from the group of CR<sub>12</sub> and N, provided that at least one of K and L is CR<sub>12</sub> where R<sub>12</sub> is not hydrogen;



R<sub>1</sub> is selected from the group consisting of a substituted or unsubstituted 3, 4, 5, 6 or 7 membered ring;

R<sub>2</sub> is -UV, where U is a moiety providing 1-6 atom separation between V and the ring to which R<sub>2</sub> is attached and V comprises a basic nitrogen atom that is capable of interacting with a carboxylic acid side chain of an active site residue of a protein;

R<sub>9</sub> is hydrogen or is selected from the group consisting of alkyl, cycloalkyl, heterocycloalkyl, arylalkyl, heteroarylalkyl, bicycloalkyl, and heterobicycloalkyl, each substituted or unsubstituted; and

each R<sub>12</sub> is hydrogen or is independently selected from the group consisting of halo, perhalo(C<sub>1-10</sub>)alkyl, CF<sub>3</sub>, alkyl, aryl, heteroaryl, aminosulfonyl, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, amino, thio, cyano, nitro, alkoxy, a carbonyl group, imine group, sulfonyl group and sulfinyl group, each substituted or unsubstituted.

39. (original) A compound according to claim 38, wherein U provides 1-4 atom separation between V and the ring.

40. (original) A compound according to claim 38, wherein U provides 1-3 atom separation between V and the ring.

41. (original) A compound according to claim 38, wherein U is selected from the group consisting of -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>-, -C(O)-, -CH<sub>2</sub>C(O)-, -C(O)CH<sub>2</sub>-, -CH<sub>2</sub>-C(O)CH<sub>2</sub>-, -C(O)CH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>C(O)-, -O-, -OCH<sub>2</sub>-, -CH<sub>2</sub>O-, -CH<sub>2</sub>OCH<sub>2</sub>-, -OCH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>O-, -N(CH<sub>3</sub>)-, -NHCH<sub>2</sub>-, -CH<sub>2</sub>NH-, -CH<sub>2</sub>NHCH<sub>2</sub>-, -NHCH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>NH-, -NH-C(O)-, -NCH<sub>3</sub>-C(O)-, -C(O)NH-, -C(O)NCH<sub>3</sub>-, -NHC(O)CH<sub>2</sub>-, -C(O)NHCH<sub>2</sub>-, -C(O)CH<sub>2</sub>NH-, -CH<sub>2</sub>NHC(O)-, -CH<sub>2</sub>C(O)NH-, -NHCH<sub>2</sub>C(O)-, -S-, -SCH<sub>2</sub>-, -CH<sub>2</sub>S-, -SCH<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>SCH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>S-, -C(O)S-, -C(O)SCH<sub>2</sub>-, -CH<sub>2</sub>C(O)S-, -C(O)CH<sub>2</sub>S-, and -CH<sub>2</sub>SC(O)-, each substituted or unsubstituted.

42. (original) A compound according to claim 38, wherein U is selected from the group consisting of  $-\text{CH}_2-$ ,  $-\text{CHR}_9-$ ,  $-\text{C}(\text{R}_9)(\text{R}_9)-$ ,  $-\text{O}-$ ,  $-\text{N}(\text{H})-$ ,  $-\text{N}(\text{R}_9)-$ , and  $-\text{S}-$ .
43. (original) A compound according to claim 38, wherein V is selected from the group consisting of a primary, secondary or tertiary amine, a heterocycloalkyl comprising a nitrogen ring atom, and a heteroaryl comprising a nitrogen ring atom
44. (original) A compound according to claim 38, wherein the basic nitrogen of V is separated from the ring atom to which  $\text{R}_2$  is attached by between 1-5 atoms.
45. (original) A compound according to claim 38, wherein the basic nitrogen of V forms part of a primary, secondary or tertiary amine.
46. (original) A compound according to claim 38, wherein the basic nitrogen of V is a nitrogen ring atom of a heterocycloalkyl comprising a nitrogen ring atom or a heteroaryl comprising a nitrogen ring atom.
47. (original) A compound according to claim 38, wherein  $\text{R}_1$  is a substituted or unsubstituted aryl.
48. (original) A compound according to claim 38, wherein  $\text{R}_1$  is a substituted or unsubstituted phenyl.
49. (original) A compound according to claim 38, wherein  $\text{R}_1$  is a substituted or unsubstituted heteroaryl.